

Maryland Clean Marinas UNDERWAY



SPRING 2006

What Am I Supposed to Do With This? *Proper Waste Disposal Methods for Marinas and Boaters*



Example of a well designed area to collect used oil, antifreeze and used batteries for recycling.

Marinas are often the recipients of “mystery waste” from boaters. Marina, boatyard, or yacht club managers may arrive in the morning to find jerry jugs of mysterious fluids, old batteries, or used oil inside their dumpster just to name a few. If a marina provides a collection tank to recycle used oil, they may find the tank contaminated with waste gasoline or other products if they do not lock the tank.

The majority of recreational boaters do not seem to know what their disposal options are for waste gas, used oil, dead batteries, and other routine waste. Or, they simply assume that if they leave their waste at the marina, that the business will clean it up for them. Unfortunately, in most cases they are right. Responsible marina and boatyard operators know they must deal with the waste once it has been left on their property.

The Maryland Clean Marina Initiative has a multi-pronged approach to assisting with these problems. First, program staff distribute educational “clean boating” materials to approximately 8,000 boaters each year at boat shows and

through other avenues. The materials include “petroleum control kits”, clean boating tip cards, and tip sheets on six different boating topics with expanded information. The tip cards and tip sheets provide web sites and phone numbers to direct boaters in proper ways to dispose of their waste.

Often, an individual citizen (i.e., the boater) can take his or her hazardous waste (gasoline, solvents, paints) to a “Household Hazardous Waste Collection Day,” held by the Maryland Department of the Environment (MDE). MDE or the resident’s county will accept and dispose of this waste for individuals free of charge. To learn more, visit http://www.mde.state.md.us/researchcenter/factsheets/landfactsheets/haz_collect.asp.

“Clean Boating” materials have been available for marinas to distribute to customers since 1998 and continue to be available while supplies last. To request supplies send an email to dmorrow@dnr.state.md.us. Clean Marina program staff also work with various units of the Coast Guard Auxiliary, Power Squadrons, and the Natural Resources Police Reserve Officers to distribute these materials during on-water safety inspections, and in classroom settings. The information is also available on the DNR website: www.dnr.maryland.gov/boating/cleanmarina. Although the Clean Marina staff have distributed nearly 50,000 of these items since 1998, this is but a fraction of the estimated 200,000 boats registered in Maryland and the transient visitors who come each year to enjoy Maryland’s waterways.

Secondly, the Clean Marina Initiative works with marinas, which play a crucial role in minimizing the amount of waste they receive by educating their customers and visitors. The Clean Marina Initiative recommends that all marinas, boatyards, and yacht clubs post a listing of free public collection tanks for recycling oil and antifreeze, and a list of Household Hazardous Waste Collection days in their area.

For a list of public collection tanks for oil and antifreeze, visit the Maryland Environmental Service at www.menv.com and look under “What We Do.” The list of Household Hazardous Waste Collection days is available at http://www.mde.state.md.us/researchcenter/factsheets/landfactsheets/haz_collect.asp.

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Shrink Wrap Recycling Returns for 2006

The Marine Trades Association of Maryland (MTAM), in cooperation with regional marinas, boatyards and county governments, is once again spearheading a project to collect and recycle used shrink-wrap from boats. The following boatyards and landfills will designate a specific area for collecting the used material for storage. Anyone dropping off shrink-wrap must cut out zippers, windows, and ties and fold the shrink wrap into as small a bundle as possible to conserve space. Questions or comments should be directed to the MTAM at 410-269-0741 or director@mtam.org. The 2006 recycling locations are:

Anne Arundel County

- Herrington Harbour North, 389 Deale Road, Tracey's Landing 410-867-4343
- Port Annapolis Marina, 7076 Bembe Beach Road, Annapolis 410-269-1990
- Atlantic Marina Resort, 2010 Knollview Drive, Pasadena 410-437-6926

Baltimore County

- Eastern Landfill, Days Cove Road, White Marsh
7a.m. to 3p.m. Monday – Saturday

Cecil County

- Locust Point Marina, 145 River Road, Elkton 410-392-4994
- McDaniel Yacht Basin, 15 Grandview Avenue, North East 410-287-8121

Kent County

- Nicholson Transfer Station, Rt. 20 West of Chestertown 410-778-7448
8a.m. – 4p.m. Monday – Saturday

Queen Anne's County

- Grasonville Convenience Center, Rt. 18, Gravel Run Road 410-758-2697
8a.m.-5p.m. Monday – Saturday

Talbot County

- Midshore Regional Landfill 7341 Barkers Landing Road 410-820-8383
7a.m. – 3:30 p.m. Monday-Friday and 7a.m. – 12:30 p.m. Saturday



Boaters and marinas are encouraged to bring their used shrink wrap to the nearest facility for recycling. Recycling this large volume of plastic may save boatyards money by resulting in far less dumpster tipping for regular trash and preserves valuable space in regional landfills.

For boaters and marine dealers who want to recycle, another option comes from a Michigan company called “Dr. Shrink” which uses the “REBAG® recycling program.” Each REBAG kit consists of a 30” x 50” clear bag with directions printed on it, prepaid UPS shipping label, and closure device. Boaters simply cut off the shrink-wrap cover above the perimeter band, stuff it into the bag and affix the shipping label. The stuffed bags can then be dropped off at a shipping center. UPS will also pick up the full REBAGs at marinas and boatyards during regular deliveries. Each REBAG holds approximately 600 square feet of shrink-wrap. Boats over 26 feet require two bags. Each year, the company recycles roughly 350,000 pounds of shrink-wrap through the REBAG program.

The REBAG kit can be purchased in individual units or in a roll of 50 directly from Dr. Shrink or from one of their distributors. A single prepaid kit costs \$12.86 while a roll of 50 is \$550.00. They can be reached at www.dr-shrink.com or 800-968-5147. The Department of Natural Resources neither recommends nor endorses any product or service. This article should be considered for informational purposes only. ❁

Proper Waste Disposal, continued from page 1

In addition to the public programs mentioned above, many private marinas, boatyards, and yacht clubs do their part in solving this problem by funding their own oil, antifreeze, and battery recycling programs. Most marinas accept this waste from customers free of charge because the disposal costs are quite low.

A very small number of marinas also accept waste gasoline from customers but charge a fee to do so. The waste gas must be removed by a licensed hazardous waste hauler, which typically charges a fee per gallon for removal. Marinas can pass this cost along to customers if they are willing to collect the waste gas. If a marina has a safe storage container away from sparks, heat, or flames, to which access can also be restricted, this may be a good way to deal with waste gasoline from customers or the facility, itself.

Waste gasoline can, and should, be prevented however. The use of fuel stabilizers during extended periods of inactivity can prevent the fuel from turning bad. Stabilizers should be actively promoted to customers at boatyards as part of annual engine winterization.

The Clean Marina Program recommends that marina staff annually update information to keep their outreach to customers current. Marinas can also receive free clean boating education materials (tip cards, tip sheets, posters, and petroleum control kits) by sending an email to dmorrow@dnr.state.md.us or calling 410-260-8770. Both marine facilities and recreational boaters can properly dispose of waste materials when armed with the most current information. ❁



Two New Maryland Clean Marinas!

Shelter Cove Marina (North East) and Atlantic Marina Resort (Pasadena) both earned the prestigious Clean Marina Award in December 2005. Both completed the process after several months of working towards the goal.

Shelter Cove worked with a neighboring Clean Marina, Bay Boat Works, to learn about the process and to benefit from their experience. Following dedicated efforts by marina owners and staff to improve fuel tanks, minimize stormwater run off and improve outreach to customers, they were ready for the Award.

At Atlantic Marina Resort, former owner and manager Al Tenneson put in time making sure his required "Spill Prevention, Control, and Countermeasure Plan" was properly prepared. Marina staff built new containment and cover for used oil, antifreeze, and battery collection to greatly reduce contamination of stormwater run-off.

Both facilities worked hard to improve their operations but feel it was worth the effort. They are commended for their commitment to protecting Maryland's waterways. ❀



L-R Woody Jackson, President; Cheryl Jackson and Dick Brinton, Project Coordinators; and Gary Parker, Marina Manager with Shelter Cove's Clean Marina Award.

94 Certified Clean Marinas, Boatyards and Yacht Clubs!

ADVANCED MARINA, OCEAN CITY
ANCHORAGE MARINA, BALTIMORE
ANCHOR BAY EAST MARINA, DUNDALK
ATLANTIC MARINA RESORT, PASADENA
BAHIA MARINA, OCEAN CITY
BALTIMORE YACHT CLUB, ESSEX
BAY BOAT WORKS, NORTH EAST
BAY BRIDGE MARINA, STEVENSVILLE
BAY RIDGE CIVIC ASSN. MARINA, ANNAPOLIS
BERT JABIN'S BOAT YARD, ANNAPOLIS
BODKIN YACHT CLUB, PASADENA
BOWLEY'S MARINA, MIDDLE RIVER
CAMPBELL'S BACHELOR POINT, OXFORD
CAMPBELL'S TOWN CREEK MARINA, OXFORD
CASA RIO MARINA, MAYO
CASTLE HARBOR MARINA, CHESTER
CHALK POINT MARINE, WEST RIVER
CHESAPEAKE HARBOUR MARINA, ANNAPOLIS
CHESAPEAKE YACHTING CENTER, ESSEX
COLTONS POINT MARINA, COLTONS POINT
CORINTHIAN YACHT CLUB, RIDGE
CUTTER MARINE SERVICES, ESSEX
DUFFY CREEK MARINA, GEORGETOWN
EASTPORT YACHT CLUB, ANNAPOLIS
FAIRVIEW MARINA, PASADENA
FERRY POINT MARINA & YACHT YARD, ARNOLD
FISHING CREEK LANDINGS MARINA, CHES. BEACH
FLAG HARBOR YACHT HAVEN, ST. LEONARD
FORT WASHINGTON MARINA, FORT WASHINGTON
GATEWAY MARINA, TRAPPE
GRATITUDE MARINA, ROCK HALL
HARBOR VIEW MARINA, BALTIMORE
HARBORVIEW MARINA, LEONARDTOWN
HARTGE'S YACHT YARD, GALESVILLE
HAVEN HARBOUR MARINA, ROCK HALL
HERRINGTON HARBOUR NORTH, TRACYS LANDING
HERRINGTON HARBOUR SOUTH, FRIENDSHIP
HINCKLEY YACHT SERVICES, OXFORD
KENT ISLAND YACHT CLUB, CHESTER

KNAPPS NARROWS MARINA, TILGHMAN IS.
LIPPINCOTT MARINE, GRASONVILLE
LITTLE ISLAND MARINA, EDGEWATER
LOCUST POINT MARINA, ELKTON
LONDONTOWNE MARINA, EDGEWATER
LONG POINT MARINA, EARLVILLE
MAGOTHY MARINA, SEVERNA PARK
MARYLAND MARINA, MIDDLE RIVER
MARYLAND YACHT CLUB, PASADENA
MEARS GREAT OAK LANDING, CHESTERTOWN
MEARS MARINA, ANNAPOLIS
MEARS POINT MARINA, GRASONVILLE
MEARS YACHT HAVEN, OXFORD
MILES RIVER YACHT CLUB, ST. MICHAELS
OAK GROVE MARINE CENTER, EDGEWATER
OAK HARBOR MARINA, PASADENA
OCEAN CITY FISHING CENTER, O.C.
OCEAN PINES MARINA, BERLIN
OSPREY POINT MARINA, ROCK HALL
PARKSIDE MARINA, MIDDLE RIVER
PINEY NARROWS YACHT HAVEN, CHESTER
POCOMOKE RIVER STATE PARK, SNOW HILL
POINT LOOKOUT MARINA, RIDGE
POINT PATIENCE MARINA, SOLOMONS
PORT ANNAPOLIS MARINA, ANNAPOLIS
PORTER'S SENECA MARINA, MIDDLE RIVER
RHODE RIVER MARINA, EDGEWATER
ROCKHOLD CREEK MARINA, DEALE
SAEFERN SADDLE & YACHT CLUB, ANNAPOLIS
THE SAILING EMPORIUM, ROCK HALL
SANDY POINT STATE PARK, ANNAPOLIS
SELBY BAY YACHT BASIN, EDGEWATER
SHELTER COVE MARINA, NORTH EAST
SHIPWRIGHT HARBOR, DEALE
SKIPJACK COVE, GEORGETOWN
SKIPJACK LANDING, CHESTER
SOLOMONS YACHTING CENTER, SOLOMONS
SOMERS COVE MARINA, CRISFIELD
SPRING COVE MARINA, SOLOMONS

SPRING COVE MARINA, ROCK HALL
ST. MICHAELS MARINA, ST. MICHAELS
SUNSET MARINA, OCEAN CITY
SWEDEN POINT MARINA, MARBURY
TAYLOR'S MARINA, ELKTON
TIDEWATER MARINA, HAVRE DE GRACE
TOWN POINT MARINA, TRACY'S LANDING
VENTNOR MARINE, PASADENA
WASHBURN'S BOATYARD, SOLOMONS
WEAVER'S MARINE SERVICES, ESSEX
WEST SHORE YACHT CENTER/ECKHARDT'S MARINE, ESSEX
WHARF AT HANDY'S POINT, WORTON
WHITEHALL YACHT YARD, ANNAPOLIS
WORTON CREEK MARINA, CHESTERTOWN
YOUNG'S BOAT YARD, EDMERE
ZAHNISER'S YACHTING CENTER, SOLOMONS

19 Clean Marina Partners

ANCHORAGE COMMUNITY MARINA, ANNAPOLIS
ASSATEAGUE STATE PARK BOAT RAMP, BERLIN
CHESAPEAKE BAY MARITIME MUSEUM, ST. MICHAELS
CUNNINGHAM FALLS STATE PARK, THURMONT
DEEP CREEK LAKE REC. AREA, SWANTON
FT. FREDERICK STATE PARK, BIG POOL
GREENBRIER STATE PARK BOAT RAMP, BOONSBORO
GREEN RIDGE STATE FOREST, CUMBERLAND
HERRINGTON MANOR STATE PARK, OAKLAND
JANES ISLAND STATE PARK BOAT RAMP, CRISFIELD
JENNINGS-RANDOLPH LAKE BOAT RAMP, OAKLAND
MARTINAK STATE PARK BOAT RAMP, QUEEN ANNE
NEW GERMANY STATE PARK, GRANTSVILLE
QUEENSTOWN HARBOR COMM. PIER, QUEENSTOWN
ROCKY GAP STATE PARK, FLINTSTONE
ROGUES HARBOR/ELK NECK STATE PARK, NORTH EAST
SUSQUEHANNA STATE PARK, HAVRE DE GRACE
TUCKAHOE STATE PARK BOAT RAMP, QUEEN ANNE
TWIN HARBORS COMMUNITY PIER, ARNOLD



Clean Marina Workshops a Success

During the winter of 2006, the Clean Marina Program hosted two introductory workshops for marina operators. The workshops were designed to involve more marinas, boatyards, and yacht clubs in the Clean Marina Program and to clearly explain what is, and what is not, involved in earning the Clean Marina Award.

The workshops, held in Annapolis and Cambridge, attracted nearly 50 participants representing 23 marine facilities. Several attendees took the first step towards certification and signed a Clean Marina Pledge at a workshop. Several others have also requested site visits, to begin the certification process.

Introductory workshops are held each winter in various locations. Although attending a workshop is a good idea, it is not necessary for participation in the program. Marina, boatyard, and yacht club operators can start their certification at any time during the year. The steps to certification are:



Participants at the Clean Marina workshop in Annapolis learn about various permitting requirements and how the Clean Marina Guidebook can assist in meeting them.

1. **Learn about the Clean Marina Program:** Request a copy of the Maryland Clean Marina Guidebook, the Award Checklist, and Clean Marina Pledge.
2. **Sign a Clean Marina Pledge:** The Pledge is a commitment to reduce pollution and to seek certification.
3. **Conduct a Self-Assessment:** Review the Award Checklist and Guidebook.
4. **Arrange an Informal Visit with Clean Marina Staff or Use a Mentor:** Staff will visit, then provide written recommendations, and are available to assist with all items. An operator of a Clean Marina may also be able to help or mentor.
5. **Enjoy the Rewards!** Clean Marinas are announced in a State-wide press release, receive an on-line business card on the DNR web site, receive a Clean Marina flag, burgee, and an Award certificate signed by Governor, Lt. Governor, and Secretary of DNR, and are invited to an annual Award Ceremony.
6. **Maintain Your Status:** Annually, Clean Marinas affirm in writing that they continue to meet Award standards. At least every three years staff will conduct another site visit to re-certify each Clean Marina.

Marinas interested in participating are encouraged to contact the Clean Marina office by calling 410-260-8773 or sending an email to dmorrow@dnr.state.md.us. Program information is also available on line at www.dnr.maryland.gov/boating/. ❄

Pumpout Grant Update



The Department of Natural Resources (DNR) reminds marina, boatyard, and yacht club operators that 100% grants are available in Maryland for the purchase and installation of marine sewage pumpout facilities. Supplemental grant funds are also available to replace pumpouts that have outlived their usefulness or to expand service to meet increased demand. There is also grant funding for ongoing pumpout operations and maintenance expenses.

Over 350 Maryland marinas have now obtained pumpouts through this program and many marinas have more than one pumpout. As a result, each year Maryland boaters dispose of approximately two million gallons of raw sewage at pumpouts as opposed to dumping it into State waters.

Although many marinas have pumpouts, there are still areas of water that are underserved by pumpouts and some marinas that are required by law to have a pumpout do not have one. Maryland law requires marinas with 50 or more slips, new marinas with more than 10 slips, and

marinas that expand to a total of more than 10 slips to have a pumpout station. DNR's grant funding is available to any Maryland marina that would like to participate.

For information about pumpout grant funding opportunities, contact Don O'Neill at doneill@dnr.state.md.us or (410) 260-8772. Information and grant applications are also available on-line at www.dnr.state.md.us/boating/pumpout/. ❄



Biodiesel Fuel for Marine Use

Written by Chad Freckmann

Executive Director, Blue Ridge Clean Fuels



Biodiesel use is growing in the marine market due to its acceptance as an environmentally preferable option. Use of biodiesel can reduce air and water borne pollution, improve engine performance and enhance the boating experience by reducing smoke and odor associated with diesel engines.

Biodiesel, a renewable diesel fuel, is made from vegetable oils and fats through a simple chemical process called transesterification. The by-product, glycerin, can be used in commercial applications from toothpaste to cough syrup. Biodiesel can be blended in any proportion with petro-diesel and once blended stays in suspension.

Biodiesel is 10% oxygen by weight giving it excellent combustion characteristics. Water pollution is significantly reduced due to less carbon (soot) accumulation and particulate (smoke) emissions. The high Cetane rating (49 to 70+) allows for smoother starting and reduces the discharge of unburned fuel.

Since Biodiesel is made entirely from organic oils and fats, it contains virtually no sulfur, aromatic hydrocarbons, metals or petroleum residues. The absence of sulfur reduces the formation of sulfur oxides and acid rain. The lack of toxic and carcinogenic aromatics (benzene, toluene and xylene) in Biodiesel means the fuel combustion gases, including carbon monoxide, and particulate matter have a reduced impact on human health.


Due to the higher Cetane rating of Biodiesel, a diesel engine will run more smoothly, particularly at low RPMs and under load. As an oxygenated fuel with no crude oil contaminants, Biodiesel burns cleanly and improves combustion efficiency. It has detergent properties and will clean an engine's fuel system. The lack of sulfur in Biodiesel decreases the level of corrosive sulfuric acid accumulating in engine crankcase oil. Biodiesel also offers fuel lubricity, reducing engine wear.

In general, using Biodiesel requires no engine modifications. B-100 (100% biodiesel) can affect rubber fuel lines and also clean the inside of old fuel tanks, causing released sediment to clog fuel filters. Certain precautions are therefore recommended for boats with older tanks and engines. Precautions include cleaning tanks to ensure no slime or condensation are in the tank or lines. Sediment and slime from deteriorated fuel may be released by Biodiesel. Fuel filters should be inspected regularly for signs of plugging.

Additionally, the solvent action of Biodiesel can slowly deteriorate old rubber hoses, gaskets and seals. These effects appear to be limited to higher concentrations of Biodiesel (e.g., 50-100%) and are rare among engines operating on a blend of B-20 or less. Hoses, gaskets and seals should be monitored for leaks. The use of Biodiesel in a diesel engine does not void parts and materials workmanship warranties of any engine manufacturer.

Fueling with Biodiesel results in noticeable changes in engine smoking and exhaust odor, and higher blends will reduce the amount of soot deposited on a boat's hull. The reduction in visible emissions and smell is a benefit that can be appreciated by everyone.

Indian River Inlet Marina in Delaware is the latest marina to offer a biodiesel blend at the pump. The State Park marina started selling a B-2 (2% biodiesel) blend in May, 2005. Marina manager Gary King says, "Although we've had mixed reviews from the customers, I fully believe this is the right thing for DE parks to do." He added, "The education of customers, who are generally very ignorant about benefits of biodiesel is key. Changing to anything new is always hard for people at first but they are starting to realize the benefits of less soot and cleaner engines."

Chad Freckmann is Executive Director of Blue Ridge Clean Fuels in Charlottesville, VA and provides biodiesel education and outreach to marine industry as part of the USDA Biodiesel Education Grant administered by the National Biodiesel Board. He can be reached at 434-996-4473 or brcfi@earthlink.net. For more information on Biodiesel visit www.biodiesel.org. 



New EPA Fuel Regulation in Effect

(As reported in Soundings Trade Only E-Newsletter)

A new Federal regulation requiring marinas to sell low-sulfur gasoline went into effect March 1. Marinas and other gasoline retailers failing to comply face penalties up to \$32,500 a day, according to the Association of Marina Industries (AMI).

The Environmental Protection Agency (EPA) drafted new regulations in 2000, and has been gradually lowering the sulfur content of gasoline, including marine fuel, since 2004. Refiners and importers of gasoline were required, as of January 1, to produce gasoline with reduced sulfur level of 80 parts per million. Retailers were given until March 1 to sell the low-sulfur fuel.

A special AMI task force has asked EPA for discretion in imposing the deadline for marinas. They argued that the seasonal nature and lower volume of gas sales, in general, should be taken into consideration when imposing the deadline for marina fuel retailers.

Marinas located in areas of the country that did not shut down for the winter likely have the lower-sulfur fuel. AMI recommends marinas in seasonal areas — particularly those that purchased gas late last summer or in the fall — contact suppliers to verify the sulfur content, or have the gas tested. If the fuel does not meet the new requirements, AMI recommends asking the suppliers to replace the inventory. ☼



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The Maryland Clean Marina Initiative promotes and celebrates voluntary adoption of measures to reduce pollution from marinas and recreational boats. The Initiative is coordinated by DNR in partnership with the marine industry.

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